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ABSTRACT

Accuracy of personality judgment has been found to be a source of individual differences in memory organization. In order to understand the cognitive process mediating memory organization, accuracy in intuitive personality judgments was assessed in 18 female nurses by the "programmed case" method. This task casts an actual life history into a series of episodes, with several alternative endings. The participants were asked to choose the correct one, based on their knowledge of the case to that point, and to explain their choices in writing, after 4 of the 21 episodes. One week later they were asked to write out as much as they could remember of the life history. Subjects were ranked by their use of distant retrieval and divided equally into high, average, and low accuracy groups; their explanations were then coded for their use of certain categories of information. The results showed that accuracy in personality judgment was related to the use of a distant retrieval strategy, and to the explanations given for those judgments. The use of motives, especially in context was related to accuracy. The use of global traits in isolation was not as successful as using information about social roles, relationships, and emotional reactions to infer motives in each particular situation. (LLL)

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**Memory Retrieval, Explanation and Predictive Accuracy  
in Personality Judgment**

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### Memory Retrieval, Explanation and Predictive Accuracy in Personality Judgment

Much of the recent work in person memory examines how the recall of behavioral descriptions is affected by factors such as consistency of the information with certain traits or the purpose the subject has in mind while reading the descriptions - such as forming an impression, predicting behavior, or recalling as much as possible (Ebbesen, 1980; Hastie, et al., 1980; Herstein, Carroll, & Hayes, 1980; Jeffery & Mischel, 1979; Srull, 1983). Typically the amount or accuracy of recall is the dependent variable and the use of traits is the basic organizing principle.

Oresick, Sokol, & Healy (1983) argued that accuracy of personality judgment was a source of individual differences in memory organization. They did not find a difference in the amount of recall. Rather, they observed that most behavioral episodes in a life history were remembered in a chronological sequence. Certain subjects supplemented this temporal retrieval strategy by filling in the gaps of their recall by associating to temporally distant episodes - it was these people who tended to be accurate judges of personality. The first goal of this study was to replicate this finding.

The second goal was to try to understand the cognitive process mediating this result by examining the explanations judges gave about their predictions of behavior. Following Dailey (1971), it was thought that judges might refer to other episodes beyond the immediate one in justifying their predictions. Also, content analysis of their reasons might yield

clues to the categories organizing their database.

#### Method

The subjects were 18 female nurses who participated in the study for course credit.

Accuracy in intuitive personality judgment was assessed by the "programmed case" (Dailey, 1971). In this task, an actual life history is cast into a series of episodes, each of which has several alternative endings. Judges must choose the correct one, based on their knowledge of the case to that point. Their knowledge base increases as they receive feedback on the correct alternatives after each episode.

After obtaining informed consent, a programmed case consisting of 21 episodes from an actual life history (devised by Klemp (1975)) was administered, followed by an impression formation task (not reported here) and debriefing. Participants were requested to explain (in writing) why they made their choices after four of the episodes. One week later the participants were asked to write out as much as they could remember of the life history.

Accuracy in the programmed case was scored following Klemp's (1975) procedure. The correct resolution received +2; ranking the correct episode as second most likely to occur received +1; other choices scored 0. Subjects were then divided equally into high, average and low accuracy groups.

Recall was measured by comparing each recalled idea to a list of all simple clauses in the case. Agreement was scored if the idea matched the gist of the original. An episode was

considered recalled if at least one idea from that episode was accurately recalled. (Two coders were able to code this and the other variables used in this study with reliabilities greater than .85.)

Inter-episodic memory retrieval was measured as follows: The episodes were numbered 1 - 21 by their order in the case. The recalled episodes were listed in the order that each subject remembered them (e.g., 1, 2, 4, 5, 10, 17, ...). Starting with the initial recalled episode, each was indexed for the distance of association to the next one by counting the number of steps to that unit. For the case of (1,2) above, the number of steps is one, i.e., unit n is linked to n + 1. For (5, 10), the distance is five steps, and so on.

An episode was coded as distantly retrieved if its predecessor was at least seven episodes distant from it. The proportion of episodes distantly retrieved was calculated for each subject. Subjects were ranked by their use of distant retrieval and divided into high, average and low use groups.

Each subject's four explanations were coded for their use of certain categories of information. The main distinction was between motives, including explicit goal statements and traits. Each of these was coded for use in isolation and in contexts, that is, in conjunction with other categories. These categories included mention of relationships, explicitly naming the other party involved, emotions, social roles or norms, and miscellaneous information, including statements of fact and behavior. Each category of information was coded for presence or absence at least once in the four explanations of each subject.

### Results

Accuracy in personality judgment was found to be significantly related to use of a distant retrieval strategy (see Table 1).

Accuracy in judgment was also related to the explanations given for those judgments. The main finding was that use of motives, especially in context, was significantly related to accuracy (see Table 1). Note that use of traits, particularly in isolation was characteristic of the low accuracy group. The context in which motive explanations were given included relationships and social roles and norms (Table 1). No differences in the use of extra-episodic information noted since no subject in any group explicitly referred to details of any but the immediate episode.

The use of motives in context was linked to the use of distant retrieval strategies. The low, average, and high groups of distant retrievers had one, five, and six members who used motives in context. This was a significant difference,  $\chi^2(2) = 10.50$ ,  $p < .006$ .

The number of episodes recalled was not significantly related to accuracy of prediction, distant retrieval strategy or type of explanation.

### Discussion

The finding that accuracy in intuitive personality judgment was related to use of distant associates in retrieval of episodes in a life history replicated a previous study. The earlier study had looked at free recall after only a half hour while in the present one the interval was seven days.

Accuracy in prediction was also related to the types of explanations employed. No person made any detailed reference to an episode other than the immediate one to justify their prediction, a surprising finding which is perhaps the result of a weakness of the method. If they had been requested to write out their thought processes rather than an explanation, perhaps more inter-episodic comparisons might have been reported.

In terms of the content of the explanations, it seems that low accuracy judges were characterized by giving isolated traits as reasons for choices, while average and high accuracy judges used motives in context with other categories of information such as social roles, relationships, emotional reactions, etc. - including traits.

This is interesting because traits have been the focus of most empirical studies of person memory organization, but perhaps they are not as important as motives and goals. Dailey's (1971) analysis of the psychological process of prediction in the programmed case found traits to be related to accuracy in prediction but in an indirect manner. The judges seemed to use traits as tools to define conventional stereotypes which helped accuracy in certain life histories. Dailey made this interpretation when he found that Q-Sorts of traits suggested that impressions were not actually related to the data of the individual life history; he thought they reflected conventional cognitive schema, a finding similar to those reported by Shweder (1982).

Hoffman, Mischel & Mazze (1981) did report a difference between goal and trait based organization of person memory. They found that goals were used if the task was memorization and traits were employed if either behavior prediction or impression formation were the tasks. Recall was facilitated by the goal organization. Unfortunately these results are not comparable to the present study since accuracy in prediction was not assessed.

In the present study it appears that use of global traits in isolation was not as successful as using information about social roles, relationships, and emotional reactions to infer motives in each particular situation.

Why should use of motives in context be related to the association of distant episodes during the retrieval process? Non-contiguous episodes in the life history were linked by common elements. For example, several episodes dealt with the protagonist's relationship with his best friend and three episodes portrayed his reaction to important deaths. A low accuracy judge focusing on global traits would not be attending to the context, while the judge who was trying to infer motives in the context of relationships, roles and emotional reactions would be processing those elements which link distant episodes, and then these links would be available during memory retrieval.

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Table 1. Summary of Results

## Accuracy in Judgment

|                                |         | Low | Average | High | $\chi^2$ | p    |
|--------------------------------|---------|-----|---------|------|----------|------|
| Distant<br>memory<br>retrieval | High    | 0   | 4       | 2    | 12.00    | .018 |
|                                | Average | 2   | 0       | 4    |          |      |
|                                | Low     | 4   | 2       | 0    |          |      |
| Motives                        |         | 2   | 5       | 6    | 7.20     | .028 |
| Isolation                      |         | 2   | 1       | 2    | .55      | -    |
| Context                        |         | 1   | 5       | 6    | 10.50    | .006 |
| Traits                         |         | 5   | 1       | 1    | 7.48     | .024 |
| Isolation                      |         | 4   | 1       | 0    | 7.20     | .028 |
| Context                        |         | 3   | 1       | 1    | 2.22     | -    |
| Relationships                  |         | 2   | 3       | 6    | 6.08     | .048 |
| Emotions                       |         | 3   | 2       | 4    | 1.33     | -    |
| Roles & Norms                  |         | 0   | 5       | 4    | 9.33     | .01  |
| Other                          |         | 2   | 6       | 5    | 7.20     | .028 |

Note: N = 18 in all cases. Degrees of freedom for the chi square = two, except for the distant memory search analysis where df = 4.